

Infection Control Assessment Tool for Hemodialysis Facilities

This tool is intended to assist in the assessment of infection control programs and practices in dialysis facilities. In order to complete the assessment, direct observation of infection control practices will be necessary. To facilitate the assessment, health departments are encouraged to share this tool with facilities in advance of their visit.

Dialysis facilities that report to NHSN complete an *Outpatient Dialysis Center Practices Survey* each year. The survey responses can be accessed in NHSN or the facility can be asked to retrieve and print their completed NHSN survey in advance of the site visit. The elements included on this assessment tool are intended to complement the NHSN survey. For facilities that do not report to NHSN, consider asking the facility to complete the practice elements of the survey.

Overview

Section 1: Facility Demographics

Section 2: Infection Control Program and Infrastructure

Section 3: Direct Observation of Facility Practices

Section 4: Infection Control Guidelines and Other Resources

Infection Control Domains for Gap Assessment

- I. Infection Control Program and Infrastructure
- II. Infection Control Training, Competency, and Audits
- III. Healthcare Personnel (HCP) Safety
- IV. Surveillance and Disease Reporting
- V. Respiratory Hygiene/Cough Etiquette
- VI. Personal Protective Equipment (PPE)
- VII. Environmental Cleaning
- VIII. Dialyzer Reuse and (if applicable) Reprocessing
- IX. Hand Hygiene
- X. Catheter and other Vascular Access Care
- XI. Injection Safety

Section 1: Facility Demographics

| | |
|---|--|
| Facility Name (for health department use only) | |
| NHSN Facility Organization ID (for health department use only) | <p>_____</p> <p><input type="checkbox"/> N/A because not CMS-certified or other reason, specify:</p> |
| State-assigned Unique ID | |
| Date of Assessment | ____/____/____ |
| Type of Assessment | <input type="checkbox"/> On-site <input type="checkbox"/> Other (specify): _____ |
| Rationale for Assessment (Select all that apply) | <p><input type="checkbox"/> Outbreak</p> <p><input type="checkbox"/> Input from ESRD Network or state survey agency</p> <p><input type="checkbox"/> NHSN data</p> <p style="padding-left: 20px;">Specify: <input type="checkbox"/> BSI <input type="checkbox"/> Other NHSN data, specify: _____</p> <p><input type="checkbox"/> Other reason (specify): _____</p> |
| Is the facility affiliated with a hospital? | <p><input type="checkbox"/> Yes (specify): _____ (for health department use only)</p> <p><input type="checkbox"/> No</p> |
| Does the facility belong to a dialysis chain? | <p><input type="checkbox"/> Yes (specify): _____</p> <p style="padding-left: 20px;"><input type="checkbox"/> DaVita</p> <p style="padding-left: 20px;"><input type="checkbox"/> Fresenius Medical Care</p> <p style="padding-left: 20px;"><input type="checkbox"/> Dialysis Clinic, Inc. (DCI)</p> <p style="padding-left: 20px;"><input type="checkbox"/> Other (specify): _____</p> <p><input type="checkbox"/> No</p> |
| What services are offered at the facility? (Select all that apply) | <p><input type="checkbox"/> Adult in-center hemodialysis</p> <p><input type="checkbox"/> Pediatric in-center hemodialysis</p> <p><input type="checkbox"/> Home hemodialysis</p> <p><input type="checkbox"/> Nocturnal hemodialysis</p> <p><input type="checkbox"/> Peritoneal dialysis</p> |
| What is the typical patient census? (include all dialysis patients cared for by the facility) | _____ |

Section 2: Infection Control Program and Infrastructure

| I. Infection Control Policies and Infrastructure | | |
|---|--|-----------------------------|
| Elements to be assessed | Assessment | Notes/Areas for Improvement |
| 1. What training does the person in charge of infection control <i>at the facility</i> have? | <input type="radio"/> Certified in Infection Control (CIC) <input type="radio"/> Other (specify): _____ <input type="radio"/> N/A, no person in charge at the facility | |
| 2. Is the facility participating in their ESRD Network HAI Quality Improvement Activity (QIA)? | <input type="radio"/> Yes <input type="radio"/> No | |
| 3. Has the facility participated in the CDC Dialysis BSI Prevention Collaborative? | <input type="radio"/> Yes <input type="radio"/> No | |
| 4. In the past 2 years, has the facility participated in any other intensive program focused on HAI prevention? (e.g., clinical trial, company-led quality improvement project) | <input type="radio"/> Yes (specify): _____ <input type="radio"/> No | |
| 5. Does the facility have a system for early detection and management of potentially infectious persons at initial points of patient encounter? <i>Note: System may include taking a travel history, assessing for diarrhea or draining infected wounds, and elements described under respiratory hygiene/cough etiquette.</i> | <input type="radio"/> Yes, system applies at (or prior to) point of facility check-in <input type="radio"/> Yes, system applies when patient arrives in dialysis treatment area <input type="radio"/> No | |

| | | |
|--|---|--|
| <p>6. Does the facility have a protocol for implementing Contact Precautions when warranted?</p> <p><i>Note: CDC does not routinely recommend Contact Precautions for multidrug resistant organisms (MDROs) in dialysis clinics. However, in certain circumstances (e.g., known or suspected MDRO transmission), Contact Precautions may be necessary.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>7. Are there signs posted in the facility that encourage patients to take an active role in and express their concerns about facility infection control practices?</p> <p><i>Visual confirmation suggested. Consider if the facility encourages this in other ways.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>8. What is the distance separating adjacent dialysis treatment stations?</p> <p><i>Involves observation. Select 2 adjacent and representative stations. Measure the closest distance between machine/chair/objects in one station and the next. If computer terminals are embedded in and shared between stations, the distance is zero.</i></p> | <p><input type="radio"/> < 3 feet</p> <p><input type="radio"/> ≥3 feet and <6 feet</p> <p><input type="radio"/> ≥6 feet</p> | |
| <p>9. Does the facility have an isolation room that is available for isolation of conditions other than hepatitis B? (i.e., not currently in use for hepatitis B patients)?</p> <p><i>Visual confirmation suggested.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>10. Does the facility use a room that is physically separate from the treatment area for storage and preparation of injectable medications?</p> <p><i>Visual confirmation suggested.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |

II. Infection Control Training, Competency, and Audits

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|--|--|-----------------------------|
| <p>1. Does the facility provide job-specific training to healthcare personnel (HCP) on infection prevention policies and procedures upon hire and at least annually and when new protocols are introduced?</p> <p><i>Note: This includes those employed by outside agencies and available by contract or on a volunteer basis to the facility.</i></p> | <p><input type="radio"/> Yes (facility should be able to provide examples of training)</p> <p><input type="radio"/> No</p> | |
| <p>2. Does the facility assess and document competency with job-specific infection prevention policies and procedures upon hire and through, at a minimum, annual evaluations/assessments?</p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>3. Does the facility routinely conduct audits of staff infection control practice?</p> | <p><input type="radio"/> Yes (facility should be able to show results of these audits)</p> <p><input type="radio"/> No</p> | |
| <p>a. If Yes, does the facility provide feedback on adherence to clinical staff?</p> | <p><input type="radio"/> Yes (facility should be able to provide examples of feedback)</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, no audits conducted</p> | |
| <p>4. Does the facility routinely use CDC tools for educating staff and/or assessing practice?</p> | <p><input type="radio"/> Yes (should be able to view CDC tools in the facility)</p> <p><input type="radio"/> No</p> | |

| | | |
|--|---|--|
| <p>a. If Yes, indicate the tool(s) used</p> <p>(Select all that apply)</p> | <ul style="list-style-type: none"> <input type="radio"/> CDC Video: Preventing BSIs in Outpatient Hemodialysis Patients: Best Practices for Dialysis Staff <input type="radio"/> CDC Approach to BSI Prevention in Dialysis Facilities (i.e., Core Interventions for Dialysis BSI Prevention) <input type="radio"/> CDC Hemodialysis Central Venous Catheter Scrub-the-Hub Protocol CDC Dialysis audit tools: <ul style="list-style-type: none"> <input type="radio"/> Hand hygiene <input type="radio"/> Catheter connection & disconnection <input type="radio"/> Catheter exit site care <input type="radio"/> Arteriovenous fistula & graft cannulation and decannulation <input type="radio"/> Injectable medication preparation & administration <input type="radio"/> Routine disinfection of dialysis station CDC Dialysis checklists: <ul style="list-style-type: none"> <input type="radio"/> Catheter connection & disconnection <input type="radio"/> Catheter exit site care <input type="radio"/> Arteriovenous fistula & graft cannulation and decannulation <input type="radio"/> Injectable medication preparation & administration <input type="radio"/> Routine disinfection of dialysis station <input type="radio"/> Other (specify): <ul style="list-style-type: none"> _____ _____ _____ _____ <input type="radio"/> N/A, no CDC tools used | |
|--|---|--|

III. Healthcare Personnel (HCP) Safety

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|--|---|-----------------------------|
| 1. Does the facility provide post-exposure evaluation and follow-up, including prophylaxis as appropriate, to healthcare personnel (HCP) at no cost following an exposure event? | <input type="radio"/> Yes <input type="radio"/> No | |
| 2. Does the facility track HCP exposure events, evaluate event data and develop/implement corrective action plans to reduce incidence of such events? | <input type="radio"/> Yes <input type="radio"/> No | |
| 3. Does the facility offer hepatitis B vaccine to personnel who may be exposed to blood or body fluids through their job duties? | <input type="radio"/> Yes <input type="radio"/> No | |
| 4. Does the facility offer influenza vaccine to all personnel? | <input type="radio"/> Yes <input type="radio"/> No | |
| 5. Does the facility conduct baseline tuberculosis (TB) screening of HCP? | <input type="radio"/> Yes <input type="radio"/> No | |
| 6. Does the facility have work-exclusion policies that encourage reporting of illnesses and do not penalize with loss of wages, benefits, or job status? | <input type="radio"/> Yes <input type="radio"/> No | |
| 7. Does the facility educate HCP on prompt reporting of illness or job-related injury to supervisor and/or occupational health? | <input type="radio"/> Yes <input type="radio"/> No | |

IV. Surveillance and Disease Reporting

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|--|---|-----------------------------|
| <p>1. Does someone <i>in the facility</i> know the facility's bloodstream infection (BSI) rate in NHSN or BSI standardized infection ratio (SIR)?</p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, data are not reported to NHSN</p> | |
| <p>2. Does the facility have a policy that mandates blood culture collection <i>before</i> antimicrobial administration any time a BSI is suspected?</p> <p><i>If yes, consider how is the policy implemented and enforced</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>3. Does the facility conduct routine screening of hemodialysis patients for hepatitis C antibody?</p> | <p><input type="radio"/> Yes, on admission and every 6-12 mos thereafter for susceptible patients</p> <p><input type="radio"/> No</p> | |
| <p>4. Does the facility know how to report clusters of infections, adverse events, or a new hepatitis B/C case to public health?</p> | <p><input type="radio"/> Yes, knows what to report and how</p> <p><input type="radio"/> No</p> | |
| <p>5. Does the facility have a system in place to communicate infection or colonization with a multidrug resistant organism (MDRO) to other healthcare facilities upon transfer?</p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |

V. Respiratory Hygiene/Cough Etiquette

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|--|--|-----------------------------|
| A. In non-clinical areas: | | |
| 1. Does the facility have signs posted at entrances with instructions to patients with symptoms of respiratory infection to: <ul style="list-style-type: none"> • cover their mouth/nose when coughing or sneezing? • use and dispose of tissues? • perform hand hygiene after contact with respiratory secretions? | <input type="radio"/> Yes <input type="radio"/> No | |
| 2. Does the facility provide a means for patients to perform hand hygiene in or near waiting areas? | <input type="radio"/> Yes <input type="radio"/> No | |
| 3. Does the facility provide space and encourage persons with symptoms of respiratory infection to sit as far away from others as possible? | <input type="radio"/> Yes <input type="radio"/> No | |
| 4. Does the facility provide tissues and no-touch receptacles for disposal of tissues? <i>Applies during periods of increased respiratory infections in the community</i> | <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A, not a period of increased respiratory infections | |
| 5. Does the facility offer facemasks upon facility entry to patients with symptoms of respiratory infection? <i>Applies during periods of increased respiratory infections in the community</i> | <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A, not a period of increased respiratory infections | |
| B. In clinical areas: | | |
| 6. Does the facility have the ability to separate symptomatic patients (by at least 6 feet) from other patients and their stations during dialysis treatment? | <input type="radio"/> Yes <input type="radio"/> No | |

VI. Personal Protective Equipment (PPE)

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|---|---|-----------------------------|
| 1. Does the facility provide job-specific training to HCP on proper selection and use of PPE upon hire, at least annually, and when policies/procedures change? | <input type="radio"/> Yes <input type="radio"/> No | |
| 2. Does the facility validate HCP competency with use of PPE? | <input type="radio"/> Yes <input type="radio"/> No | |
| 3. Supplies necessary for adherence to PPE recommendations (e.g., gloves, gowns, and face protection) are available and located near point of use. <i>Visual confirmation suggested.</i> | <input type="radio"/> Yes <input type="radio"/> No | |

VII. Environmental Cleaning

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|--|--|-----------------------------|
| <p>1. Does the facility have written policies and procedures for routine cleaning and disinfection of environmental surfaces, including clearly defining responsible personnel?</p> <p><i>Note: Policy and procedures should identify staff responsible for performing cleaning and disinfection as well as those responsible for selection and preparation of disinfectant solution(s).</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>2. Does the facility provide job-specific training to responsible personnel on environmental cleaning and disinfection upon hire, at least annually, and when policies/procedures change?</p> <p><i>Note: If environmental cleaning is performed by contract personnel, facility should verify this is provided by contracting company.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |
| <p>3. Does the facility regularly audit (monitor and document) adherence to cleaning and disinfection procedures?</p> <p><i>Note: If environmental cleaning is performed by contract personnel, facility should verify this is provided by contracting company.</i></p> | <p><input type="radio"/> Yes (facility should be able to show results of these audits)</p> <p><input type="radio"/> No</p> | |
| <p>4. Does the facility have a policy/procedure for decontamination of spills of blood or other body fluids?</p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> | |

VIII. Dialyzer Reuse and Reprocessing

| Elements to be assessed | Assessment | Notes/Areas for Improvement |
|---|---|-----------------------------|
| <p>1. Does the facility reuse dialyzers?</p> | <p><input type="radio"/> Yes (specify):</p> <ul style="list-style-type: none"> <input type="radio"/> Dialyzers are reprocessed on-site <input type="radio"/> Dialyzers are reprocessed off-site <p><input type="radio"/> No</p> | |
| <p>A. If Yes, complete the following section. Questions 2 & 3 apply to all facilities that reuse dialyzers--reprocessing can be on- or off-site.</p> | | |
| <p>2. Does the facility document informed consent for patients who participate in dialyzer reuse?</p> | <p><input type="radio"/> Yes (facility should be able to provide informed consent document)</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, facility does not reuse dialyzers</p> | |
| <p>3. Does the facility have policies and procedures to ensure that dialyzers are cleaned and reprocessed appropriately prior to reuse?</p> <p><i>If reprocessing is performed off-site, facility policies and procedures should address safe handling of used dialyzers prior to reprocessing and assessment of disinfection process after reprocessing.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, facility does not reuse dialyzers</p> | |

B. If answered Yes to Question 1 and dialyzers are reprocessed on site, complete the following section. Questions 4-7 apply to facilities that perform dialyzer reprocessing on-site.

| | | |
|---|--|--|
| <p>4. Does the facility train personnel responsible for reprocessing dialyzers on proper selection and use of PPE and recommended steps for reprocessing equipment?</p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, facility does not reuse dialyzers or dialyzer reprocessing performed off-site</p> | |
| <p>5. Does the facility test the competency of personnel responsible for reprocessing dialyzers upon hire, at least annually, and when new equipment is introduced?</p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, facility does not reuse dialyzers or dialyzer reprocessing performed off-site</p> | |
| <p>6. Does the facility regularly audit (monitor and document) adherence to reprocessing procedures and provide feedback to personnel regarding their performance?</p> | <p><input type="radio"/> Yes (facility should be able to show results of these audits)</p> <p><input type="radio"/> No</p> <p><input type="radio"/> N/A, facility does not reuse dialyzers or dialyzer reprocessing performed off-site</p> | |
| <p>7. Does the facility perform routine maintenance for reprocessing equipment (e.g., automated reprocessors) by qualified personnel in accordance with manufacturer instructions?</p> <p><i>Confirm maintenance records are available.</i></p> | <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Not applicable because only manual reprocessing methods used</p> <p><input type="radio"/> N/A, facility does not reuse dialyzers or dialyzer reprocessing performed off-site</p> | |

Section 3: Direct Observation of Facility Practices

Certain infection control lapses (e.g., reuse of syringes on more than one patient or to access a medication container that is used for subsequent patients; reuse of lancets) can result in bloodborne pathogen transmission and should be halted immediately. Identification of such lapses warrants appropriate notification and testing of potentially affected patients.

**National Healthcare Safety Network (NHSN) minimum plan requirements for each audit type are included as a number of minimum observations to consider.*

| Infection Control Observations | | | |
|---|-------------|---|----------|
| Infection Control Observations | % Adherence | Gaps Identified | Comments |
| (i) Hand hygiene http://www.cdc.gov/dialysis/PDFs/collaborative/He modialysis-Hand-Hygiene-Observations.pdf <i>*NHSN minimum requirement = 30 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |
| (ii) Catheter connection and disconnection http://www.cdc.gov/dialysis/PDFs/collaborative/Cat heter-Connection-Disconnection-Observations.pdf <i>*NHSN minimum requirement = 10 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |
| (iii) Catheter exit site care http://www.cdc.gov/dialysis/PDFs/collaborative/Cat heter-Exit-Site-Care-Observations.pdf <i>*NHSN minimum requirement = 5 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |
| (iv) Arteriovenous fistula & graft cannulation http://www.cdc.gov/dialysis/PDFs/collaborative/AV-Fistula-Graft-Can-Decannulation-Observations-AT.pdf <i>*NHSN minimum requirement = 10 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |
| (v) Injectable medication preparation http://www.cdc.gov/dialysis/PDFs/collaborative/He modialysis-InjectionSafety-Observations.pdf <i>*NHSN minimum requirement = 5 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |
| (vi) Injectable medication administration http://www.cdc.gov/dialysis/PDFs/collaborative/He modialysis-InjectionSafety-Observations.pdf <i>*NHSN minimum requirement = 5 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |
| (vii) Routine disinfection of dialysis station http://www.cdc.gov/dialysis/PDFs/dialysis-Station-Disinfect-Tool-7-2015.pdf <i>*NHSN minimum requirement = 10 observations</i> | | <input type="radio"/> Yes <input type="radio"/> No | |

Section 4: Infection Control Guidelines and Other Resources

- Infection prevention resources for dialysis settings: <http://www.cdc.gov/dialysis/>
- Relevant guidelines: <http://www.cdc.gov/dialysis/guidelines/index.html>
- CDC Recommendations for Preventing Transmission in Chronic Hemodialysis Patients: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm>
- Prevention tools, including checklists and audit tools: <http://www.cdc.gov/dialysis/prevention-tools/index.html>
- CDC Approach to BSI Prevention in Dialysis Facilities (i.e., the Core Interventions for Dialysis BSI Prevention): <http://www.cdc.gov/dialysis/prevention-tools/core-interventions.html>
- CDC hemodialysis central venous catheter Scrub-the-Hub Protocol: <http://www.cdc.gov/dialysis/PDFs/collaborative/Hemodialysis-Central-Venous-Catheter-STH-Protocol.pdf>
- Environmental surface disinfection in dialysis facilities: Notes for clinical managers: http://www.cdc.gov/dialysis/PDFs/collaborative/Env_notes_Feb13.pdf
- Provider education: <http://www.cdc.gov/dialysis/clinician/index.html>
- Best practices video: <http://www.cdc.gov/dialysis/prevention-tools/training-video.html>
- Infection prevention in dialysis continuing education course: <http://www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html>
- NHSN Outpatient Dialysis Center Practices Survey: http://www.cdc.gov/nhsn/forms/57.500_outpatientdialysissurv_blank.pdf